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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,205	02/16/2004	Bhupendra Kumar Gupta	137229	2204
30952	7590	05/17/2005	EXAMINER	
HARTMAN AND HARTMAN, P.C. 552 EAST 700 NORTH VAIPARAISO, IN 46383			KOEHLER, ROBERT R	
			ART UNIT	PAPER NUMBER
			1775	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/708,205	Applicant(s) GUPTA, ET AL.	
	Examiner Robert R. Koehler	Art Unit 1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-20 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*RRK*  
*5-13-05*

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02162004</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 to 3 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,530,971 B1 (Cohen, et al.) having a filing date of January 29, 2001.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Cohen, et al. discloses a method for refurbishing or repairing a worn surface of a component or article such as gas turbine engine combustor liners formed from nickel-base and cobalt-base superalloys. Cohen, et al. discloses the usage of a braze alloy composition in the form of a slurry, a presintered pre-form, or a plasticized tape. Each form utilizes at least two alloy powders and a binder. When a brazing tape is utilized in the repair of a worn surface, the tape is placed over the worn surface region and heated to melt the components, thereby filling the worn surface with the braze material. The braze material and substrate are subjected to a heat treatment which interdiffuses the braze alloy and the substrate. Any excess braze material

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can be machined from the repaired region by a suitable technique. According to the braze material compositions provided by Cohen, et al., a lower-melting (second alloy) powder is dispersed in a matrix of a harder (first alloy) powder, wherein the first alloy powder must contain significant amounts of strengthening metals such as tungsten and molybdenum. See line 30 in column 2 to line 34 in column 3 and line 56 in column 4 to line 6 in column 6.

***Allowable Subject Matter***

Claims 4 to 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8 to 20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art search has not produced any references which teach, suggest, or disclose applicants' claimed process for refurbishing a worn surface of a component wherein the process utilizes a cobalt-base braze material containing 22.5 to 24.25 weight percent chromium and/or a cobalt-base wear-resistant alloy containing 27 to 29 weight percent molybdenum and 16.5 to 17.5 weight percent chromium. Also, the prior art does not teach or reasonably suggest a process of refurbishing a shroud support component of a turbomachine wherein the worn surface is on a support flange of the shroud support component and the support flange is adapted for supporting a shroud component of the turbomachine. The prior art search has not produced any references which teach, suggest, or disclose applicants' claimed refurbished shroud support component of a turbomachine having a wear-resistant coating with a machined surface that defines a wear surface of the shroud support component wherein the wear-resistant coating comprises a braze material dispersed in a matrix material of a wear-resistant alloy. Also, the prior art does not teach, suggest, or disclose applicants' claimed refurbished shroud support component of a gas turbine engine comprising **(a)** a forward flange having a forward lip and a

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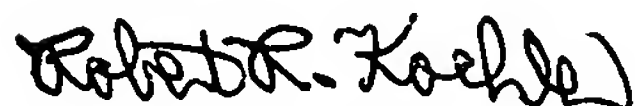
forward face and **(b)** wear-resistant coatings diffusion bonded to the forward lip and the forward face wherein the wear-resistant coatings have machined surfaces and the wear-resistant coatings consist of a braze material dispersed in a matrix material of a wear-resistant cobalt-base alloy.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is **(571) 272-1536**. The Examiner can normally be reached on Tuesday to Friday from 9:30 AM to 7:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on **(571) 272-1535**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).



**ROBERT R. KOEHLER  
PRIMARY EXAMINER**

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May 12, 2005**